16-345 (L)

16-361 (consolidated)

IN THE UNITED STATES COURT OF APPEALS FOR THE SECOND CIRCUIT

CATSKILL MOUNTAINKEEPER, INC.; CLEAN AIR COUNCIL; DELAWARE-OTSEGO AUDUBON SOCIETY, INC.; RIVERKEEPER, INC.; AND SIERRA CLUB,

Petitioners,

STOP THE PIPELINE, INC.

Petitioner,

- V. -

FEDERAL ENERGY REGULATORY COMMISSION.

Respondent,

CONSTITUTION PIPELINE CO., LLC, IROQUOIS GAS TRANSMISSION SYSTEM, L.P., NATURAL GAS SUPPLY ASSOCIATION,

Intervenors.

On Petition for Review of Orders of the Federal Energy Regulatory Commission

FINAL FORM OPENING BRIEF OF PETITIONERS CATSKILL MOUNTAINKEEPER, INC.; CLEAN AIR COUNCIL; DELAWARE-OTSEGO AUDOBON SOCIETY, INC.; RIVERKEEPER, INC; AND SIERRA CLUB

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Page Proof Brief: July 12, 2016 Final Form Brief: October 17, 2016

CORPORATE DISCLOSURE STATEMENTS

Catskill Mountainkeeper, Inc.: Catskill Mountainkeeper, Inc. has no parent companies, and there are no publicly held companies that have a 10 percent or greater ownership interest in Catskill Mountainkeeper, Inc.

Catskill Mountainkeeper, Inc., a corporation organized and existing under the laws of the State of New York, is a nonprofit organization dedicated to being the strongest and most effective possible advocate for the Catskill region and to working through a network of concerned citizens promoting sustainable growth and protection of the natural resources essential to healthy communities.

Clean Air Council: Clean Air Council has no parent companies, and there are no publicly held companies that have a 10 percent or greater ownership interest in Clean Air Council.

Clean Air Council, a corporation organized and existing under the laws of the State of Pennsylvania, is a nonprofit organization serving the Mid-Atlantic Region that is dedicated to protecting and defending everyone's right to breathe clean air.

Delaware-Otsego Audubon Society, Inc.: Delaware-Otsego Audubon Society, Inc. has no parent companies, and there are no publicly held companies that have a 10 percent or greater ownership interest in Delaware-Otsego Audubon Society, Inc.

Delaware-Otsego Audubon Society, Inc., a nonprofit corporation organized and existing under the laws of the State of New York, is a chapter of the National Audubon Society, and is dedicated to the natural environment, with activities focused on protection and maintenance of ecological systems, wise use and conservation of natural resources, and environmental quality improvement.

Riverkeeper, Inc.: Riverkeeper, Inc. has no parent companies, and there are no publicly held companies that have a 10 percent or greater ownership interest in Riverkeeper, Inc.

Riverkeeper, Inc., a corporation organized and existing under the laws of the State of New York, is a nonprofit organization dedicated to protecting the environmental, recreational, and commercial integrity of the Hudson River and its tributaries, and to safeguarding the drinking water of nine million New York City and Hudson Valley residents.

Sierra Club: Sierra Club has no parent companies, and there are no publicly held companies that have a 10 percent or greater ownership interest in Sierra Club.

Sierra Club, a corporation organized and existing under the laws of the State of California, is a national nonprofit organization dedicated to the protection and enjoyment of the environment

TABLE OF CONTENTS

TABLE O	F AUT	HORITIESv
GLOSSAI	RY	X
JURISDIC	CTION	AL STATEMENT1
STATEM	ENT O	F THE ISSUES2
STATEM	ENT O	F THE CASE3
STATEM	ENT O	F FACTS6
I.	THE	PROJECT6
II.	ENV	TRONMENTAL IMPACTS OF THE PROJECT8
	A.	Impacts of Induced Natural Gas Development8
	B.	Impacts of Greenhouse Gas Emissions11
	C.	Impacts on Water Quality13
SUMMAR	RY OF	THE ARGUMENT15
ARGUME	ENT	
I.		C UNLAWFULLY REFUSED TO CONSIDER EFFECTS OF JECT-INDUCED NATURAL GAS PRODUCTION18
	A.	NEPA Requires that FERC Analyze the Indirect Effects of the Project
	В.	The Project Likely Would Cause Additional Natural Gas Production
	C.	FERC Unlawfully Concluded that Impacts from Induced Growth in Gas Production Are Too Speculative to Be Analyzed

11.		EMISSIONS AND CLIMATE IMPACTS28
	A.	FERC Arbitrarily Ignored Significant Greenhouse Gas Emissions from the Project
	В.	FERC Improperly Discounted the Project's Greenhouse Gas Emissions Based on Their Relative Contribution to National and Global Emissions
	C.	The Commission Did Not Evaluate the Potential Climate Change Impacts from the Project's Greenhouse Gas Emissions.35
III.		COMMISSION'S ANALYSIS OF THE PROJECT'S ACTS ON WATER QUALITY VIOLATED NEPA39
	A.	The Absence of Site-Specific Stream Crossing Information Made It Impossible for the Commission to Evaluate the Project's Impacts on Water Quality
	В.	FERC Impermissibly Based Its Finding of No Significant Environmental Impacts on Impermissible Assumptions51
IV.	THE	C VIOLATED THE CLEAN WATER ACT BY APPROVING PROJECT BEFORE NEW YORK DECIDED WHETHER TO E A SECTION 401 CERTIFICATION
	A.	The Clean Water Act Requires that FERC Withhold Pipeline Approval Until the State Has Granted a Section 401 Certification
	В.	FERC's Conditional Approval of the Project Violated the Clean Water Act
CONCLUS	ION	60
		S OF APPELLATE PROCEDURE FORM 6 F COMPLIANCE WITH RULE 32(A)61

TABLE OF AUTHORITIES

	Page(s)
Cases	
Ala. Rivers Alliance v. FERC, 325 F.3d 290 (D.C. Cir. 2003)	56
Am. Rivers v. FERC, 129 F.3d 99 (2d Cir. 1997)	56, 57
Barnes v. U.S. Dep't of Transp., 655 F.3d 1124 (9th Cir. 2011)	27
Border Power Plant Working Grp. v. Dep't of Energy, 260 F. Supp. 2d 997 (S.D. Cal. 2003)	20, 21, 24
Brady Campaign to Prevent Gun Violence v. Salazar, 612 F. Supp. 2d 1 (D.D.C. 2009)	20
Calvert Cliffs' Coordinating Comm., Inc. v. Atomic Energy Comm'n, 449 F.2d 1109 (D.C. Cir. 1971)	31
City of Grapevine, Tex. v. Dep't of Transp., 17 F.3d 1502 (D.C. Cir. 1994)	59
City of Tacoma, Wash. v. FERC, 460 F.3d 53 (D.C. Cir. 2006)	56
Coal. on W. Valley Nuclear Wastes v. Chu, 592 F.3d 306 (2d Cir. 2009)	40, 43
Coal. for Responsible Growth & Res. Conservation v. FERC, 485 F. App'x 472 (2d Cir. 2012)	22
Ctr. for Biological Diversity v. Bureau of Land Mgmt., 937 F. Supp. 2d 1140 (N.D. Cal. 2013)	27
Ctr. for Biological Diversity v. Nat'l Hwy. Traffic Safety Admin., 538 F.3d 1172 (9th Cir. 2008)	32, 36, 38

Dep't of Transp. v. Public Citizen, 541 U.S. 752 (2004)
Dominion Cove Point LNG, LP, 151 FERC ¶ 61,095 (May 4, 2015)29
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High Country Conservation Advocates v. U.S. Forest Serv., 52 F. Supp. 3d 1174 (D. Colo. 2014)
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LaFlamme v. FERC, 852 F.2d 389 (9th Cir. 1988)50
Marsh v. Or. Natural Res. Council, 490 U.S. 360 (1989)
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Motor Vehicle Mfrs. Ass'n of U.S., Inc. v. State Farm Mut. Auto. Ins. Co., 463 U.S. 29 (1983)24, 28
N. Plains Res. Council, Inc. v. Surface Transp. Bd., 668 F.3d 1067 (9th Cir. 2011)
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Potomac Alliance v. U.S. Nuclear Reg. Comm'n, 682 F.2d 1030 (D.C. Cir. 1982)	24
Pub. Utils. Comm'n of Cal. v. FERC, 900 F.2d 269 (D.C. Cir. 1990)	59
PUD No. 1 of Jefferson Cnty. v. Wash. Dep't of Ecology, 511 U.S. 700 (1994)	56
New Mexico ex rel. Richardson v. Bureau of Land Mgmt., 565 F.3d 683 (10th Cir. 2009)	53
S.D. Warren Co. v. Me. Bd. of Envtl. Prot., 547 U.S. 370 (2006)	58
Save Our Ecosystems v. Clark, 747 F.2d 1240 (9th Cir. 1984)	27, 32, 33, 46
Scientists' Inst. for Pub. Info., Inc. v. Atomic Energy Comm'n, 481 F.2d 1079 (D.C. Cir. 1973)	19–20, 26
Sierra Club v. Peterson, 717 F.2d 1409 (D.C. Cir. 1983)	15
Sierra Club v. U.S. Army Corps of Eng'rs, 701 F.2d 1011 (2d Cir. 1983)	
Statutes	
15 U.S.C. § 717f	1, 3
15 U.S.C. § 717r	1, 4
33 U.S.C. § 1341	2, 4, 55
42 U.S.C. 8 4321	2 15

Regulations	
40 C.F.R. § 1502.16	19
40 C.F.R. § 1502.22	.27, 32, 38, 46
40 C.F.R. §1508.8	19
Legislative Materials	
Sen. Rep. No. 92-414 (1971), reprinted in 1972 U.S.C.C.A.N. 3668 (1972)	55
Other Authorities	
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Case 16-345, Document 239-1, 10/20/2016, 1888674, Page10 of 75

Lucie M. Lévesque & Monique G. Dubé, Review of the Effects of In-	
Stream Pipeline Crossing Construction on Aquatic Ecosystems and	
Examination of Canadian Methodologies for Impact Assessment,	
132 Envtl. Monitoring & Assessment 395 (2007)	.44, 47
Matthew R. Harrison et al., Natural Gas Industry Methane Emission	
Factor Improvement Study Final Report (Dec. 2011)	12

GLOSSARY

AG Complaint and Petition by the Office of

the New York Attorney General Against

Constitution Pipeline LLC for

Violations of Law and the Order Issuing Certificates of Public Convenience and

Necessity (May 13, 2016)

Application Constitution Pipeline Company, LLC,

Application for Certificate of Public Convenience and Necessity (June 13, 2013); Iroquois Gas Transmission System, LP, Application for Certificate of Public Convenience and Necessity

(June 13, 2013)

Authorization Order Constitution Pipeline Company, LLC,

149 FERC ¶ 61,199 (2014) approving

the Project

Cabot Oil & Gas Corporation

CO₂e Carbon dioxide equivalent

CEQ Council on Environmental Quality

CEQ Climate Guidance CEQ, Revised Draft Guidance for

Greenhouse Gas Emissions and Climate

Change (Dec. 2014)

Commission or FERC Federal Energy Regulatory Commission

Constitution Constitution Pipeline Co., LLC

DEIS FERC Draft Environmental Impact

Statement, Constitution Pipeline and Wright Interconnect Projects (June 10,

2013)

DEIS Comments Comments on DEIS submitted on behalf

of Catskill Mountainkeeper et al. (Apr.

7, 2014)

EPA Environmental Protection Agency

EPA Comments on FEIS Letter from Judy-Ann Mitchell, EPA, to

Kimberly Bose, FERC, EPA Comments

Constitution Pipeline and Wright Interconnection Projects Final

Environmental Impact Statement (Dec.

08, 2014)

FEIS FERC Final Environmental Impact

Statement, Constitution Pipeline and Wright Interconnect Projects (Oct. 24,

2014)

NEPA National Environmental Policy Act

NYSDEC New York State Department of

Environmental Conservation

NYSDEC Denial Letter from John Ferguson, NYSDEC to

Lynda Schubring, Constitution (Apr. 22,

2016), denying Constitution's application for certification under Section 401 of Clean Water Act

Project Constitution's proposed approximately

124-mile-long interstate natural gas pipeline, extending from Susquehanna County, Pennsylvania, to Schoharie County, New York, and related facilities

Rehearing Order Constitution Pipeline Co., LLC, 154

FERC ¶ 61,046 (2016) denying

rehearing

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Mountainkeeper et al., In re

Constitution Pipeline Co. (Dec. 30,

2014)

JURISDICTIONAL STATEMENT

Petitioners Catskill Mountainkeeper, Inc.; Clean Air Council; Delaware-Otsego Audubon Society, Inc.; Riverkeeper, Inc.; and Sierra Club (collectively, "Petitioners") seek review of two final orders issued by the Federal Energy Regulatory Commission ("FERC" or the "Commission"). The first—issued on December 2, 2014, under Section 7 of the Natural Gas Act, 15 U.S.C. § 717f—granted Constitution Pipeline Co., LLC ("Constitution") and Iroquois Gas Transmission System, L.P. ("Iroquois") permission to construct and operate a 124-mile natural gas pipeline and related facilities (the "Project"). The second—issued on January 28, 2016, under the Natural Gas Act, 15 U.S.C. § 717r(a)—denied Petitioners' Request for Rehearing of the Authorization Order, which they timely filed on December 30, 2014.

On February 5, 2016, Petitioners timely filed their petition for judicial review. *See* 15 U.S.C. § 717r(b) (requiring filing within 60 days of final order). This Court has jurisdiction under 15 U.S.C. § 717r(b) because Iroquois is headquartered in Connecticut.

¹ Order Issuing Certificates and Approving Abandonment, *Constitution Pipeline Co. LLC & Iroquois Gas Transmission Sys.*, *LP*, 149 FERC ¶ 61,199 (Dec. 2, 2014) ("Authorization Order") [JA005−61]. "[JA__]" refers to pages of the Joint Appendix. "[Add.__]" refers to pages in the Addendum to this brief.

² Order Denying Rehearing and Approving Variance, *Constitution Pipeline Co. LLC & Iroquois Gas Transmission Sys.*, *LP*, 154 FERC ¶ 61,046 (Jan. 28, 2016) ("Rehearing Order") [JA062–36].

STATEMENT OF THE ISSUES

- 1. Did FERC act arbitrarily, capriciously, or unlawfully under the National Environmental Policy Act ("NEPA"), 42 U.S.C. §§ 4321 *et seq.*, which requires evaluation of the Project's reasonably foreseeable indirect environmental effects, when it (a) determined that providing a new 124-mile 650,000 dekatherm per day conduit to new natural gas markets would not promote regional gas development and (b) refused to use readily available tools and information to predict and evaluate the environmental impacts of new production?
- 2. Did FERC act arbitrarily, capriciously, or unlawfully under NEPA, when it concluded that the Project's potential climate change impacts were insignificant?
- 3. Did the Commission act arbitrarily, capriciously, or unlawfully under NEPA when it concluded that the Project's potential impacts to water quality could be mitigated and therefore were insignificant?
- 4. Did FERC violate Section 401 of the Clean Water Act, 33 U.S.C. § 1341, by approving the Project before New York acted on Constitution's application for a certification that any discharge from the Project would comply with the Clean Water Act?

STATEMENT OF THE CASE

On June 13, 2013, Constitution and Iroquois filed their applications for a Certificate of Public Convenience and Necessity under the Natural Gas Act to construct and operate a 124-mile interstate natural gas pipeline and related facilities.³ Petitioners thereafter successfully moved to intervene in the FERC proceeding.⁴

On February 12, 2014, FERC issued the draft Environmental Impact Statement for the Project.⁵ Petitioners submitted comments on the DEIS, noting numerous deficiencies in FERC's analysis.⁶ Significantly, FERC did not assess the impacts from the upstream natural gas development that would be induced by the pipeline, failed to adequately analyze the climate change impacts of the Project, and based its decision on inadequate information about potential water quality impacts. On October 24, 2014, the Commission published the Final

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³ Constitution Pipeline Co., LLC, Application for Certificate of Public Convenience and Necessity, FERC Docket No. CP13-499-000 (June 13, 2013); Iroquois Gas Transmission System, LP, Application for Certificate of Public Convenience and Necessity, Docket No. CP13-502-000 (June 13, 2013) (collectively, "Application") [JA986–1072]. The Natural Gas Act requires that a proposed pipeline transporting natural gas across state lines receive a Certificate of Public Convenience and Necessity from the Commission. 15 U.S.C. § 717f(c).

⁴ See Authorization Order ¶ 17 [JA010].

⁵ FERC, FERC EIS No. 0249D, Draft Environmental Impact Statement, Constitution Pipeline and Wright Interconnect Projects, FERC Docket Nos. CP13-499-000, CP13-502-000, PF12-9-000 (Feb.12, 2014) ("DEIS").

⁶ Letter from Bridget Lee, Earthjustice, on behalf of Catskill Mountainkeeper et al., to Kimberly Bose, FERC (Apr. 7, 2014) ("DEIS Comments") [JA1679–1756].

Environmental Impact Statement, which added some analysis on upstream impacts, but failed to fully address numerous critical aspects of Petitioners' comments on the DEIS.⁷

On December 2, 2014, FERC issued the Authorization Order, finding that the Project "will result in some adverse environmental impacts, but that these impacts will be reduced to less-than-significant levels with the implementation of Constitution's and Iroquois' proposed mitigation and staff's recommendations (now adopted as conditions in the attached Appendix A of the order)."

The Authorization Order and the Commission's finding of no significant impact were issued before the Project received several other key approvals. In particular, New York State had not made a decision to certify that the Project would comply with the requirements of the Clean Water Act, as required under Section 401 ("401 Certification"). *See* 33 U.S.C. § 1341.

As required by the Natural Gas Act, Petitioners submitted a rehearing request to the Commission within thirty days of the Authorization Order. See 15 U.S.C. § 717r(a). Petitioners asked FERC to reconsider its decision to grant the Authorization Order because its issuance before New York's decision on the 401

⁷ FERC, FEIS No. 0249F, Final Environmental Impact Statement, Constitution Pipeline and Wright Interconnect Projects, Docket Nos. CP13-499-000, CP13-502-000, PF12-9-000 (Oct. 24, 2014) ("FEIS") [JA137–985].

⁸ Authorization Order ¶ 3 [JA006].

⁹ Request for Rehearing of Catskill Mountainkeeper, et al., FERC Dockets No. CP13-499 and CP13-502 (Dec. 31, 2014) ("Rehearing Request") [JA1992–2017].

Certification violated the Clean Water Act and because the Commission's environmental review of the Project did not comply with NEPA. The Commission granted rehearing on January 27, 2015, but only to give itself additional time to consider Petitioners' Rehearing Request and similar requests made by others. ¹⁰ The Commission then sat on the Rehearing Request for more than a year while Constitution exercised eminent domain proceedings against landowners.

FERC denied the Rehearing Request on January 28, 2016.¹¹ Three days later, the Commission authorized tree clearing activities along the pipeline route in Pennsylvania.¹² Petitioners filed a timely Petition for Review with this Court on February 5, 2016, in addition to an emergency motion for a stay of construction pending review. On February 24, 2016, the Court denied the emergency motion.

Constitution, Iroquois, and the Natural Gas Supply Association subsequently sought and were granted intervention. On March 7, 2016, Petitioners' case was consolidated with another case also challenging the Commission's Authorization and Rehearing Orders.

On April 22, 2016, the New York State Department of Environmental Conservation ("NYSDEC") denied Constitution's application for a 401

¹⁰ Order Granting Rehearing for Further Consideration, FERC Docket Nos. CP13-499-001 & CP13-502-001 (Jan. 27, 2015) [JA2090].

¹¹ Rehearing Order [JA062–36].

¹² Letter from Terry Turpin, FERC, to Lynda Schubring, Constitution, FERC Docket No. CP13-499-000 (Jan. 29, 2016) [JA2237–38].

Certification.¹³ Without the 401 Certification, Constitution cannot proceed with the Project. Constitution filed a timely appeal of NYSDEC's denial with this Court on May 16, 2016. Petitioners successfully have intervened in that proceeding.

STATEMENT OF FACTS

I. THE PROJECT

The Commission authorized Constitution to construct and operate a 124-mile, 30-inch diameter interstate natural gas pipeline designed to transport up to 650,000 dekatherms of natural gas per day. The Project also would add 21,800 horsepowers of compression at the Wright Compressor Station in Schoharie County, New York to support delivery of the pipeline's natural gas. The Authorization Order contemplates that the Project would operate for at least 15–20 years but does not establish a time-limit on use of the pipeline. It is not unusual for interstate natural gas pipelines to operate for 50 or more years.

¹³ Letter from John Ferguson, NYSDEC, to Lynda Schubring, Constitution (Apr. 22, 2016) ("NYSDEC Denial") [JA2405–18].

¹⁴ Authorization Order ¶ 1 [JA005].

¹⁵ FEIS at 2-6 [JA196].

¹⁶ See Authorization Order ¶ 14 (authorizing a Capacity Lease Agreement between Constitution and Iroquois with a 15-year primary term and an option to extend for a subsequent five-year period.) [JA010].

¹⁷ Interstate Natural Gas Association of America, The Interstate Natural Gas Transmission System: Scale, Physical Complexity and Business Model, Executive Summary (2010), http://www.ingaa.org/file.aspx?id=10751.

The Project would begin in Susquehanna County, Pennsylvania, where the majority of the Marcellus Shale gas wells of Cabot Oil & Gas Corporation ("Cabot") are located. Cabot is one of the partners in Constitution and also has executed a long-term contract for 500,000 dekatherms per day of firm capacity on the pipeline. The region of Susquehanna County where Cabot's Marcellus Shale wells primarily are located currently has relatively limited access to interstate pipelines and no direct access to the demand centers in the Northeastern markets.

The pipeline would traverse approximately 20 miles of Susquehanna County and then cross 100 miles of New York State through Broome, Chenango,

Delaware, and Schoharie Counties. The affected region is largely rural, with forests, agricultural land, wetlands, and numerous waterbodies.²¹

Construction and operation of the pipeline would require clearing and maintaining a 100-foot right-of-way spanning 124 miles.²² Access roads and staging areas also would be cleared during construction. Only nine percent of the Project would be co-located with existing rights-of-way.²³ Hundreds of thousands of trees and other vegetation would be removed from the Project's path, including

¹⁸ See Cabot, Marcellus Shale, http://www.cabotog.com/operations/marcellus/ (acreage in Marcellus Shale "primarily in Susquehanna County, Pennsylvania").

¹⁹ Authorization Order ¶ 4, 8 [JA006, 008].

²⁰ FEIS at 3-15 [JA239].

²¹ *Id.* at ES-4–ES-5, ES-8, 4-78 [JA162–63, 166, 382].

²² *Id.* at 2-10 [JA200].

²³ *Id.* at 2-8 [JA198].

through the use of herbicides. In all, 1,859 acres of land would be disturbed, 757 acres of which would be altered permanently.²⁴ Close to half of the forested land required for the Project is interior forest, of which 217.7 acres would be permanently eliminated.²⁵ Some of these forested areas provide important habitat to species of migratory birds.²⁶

The pipeline also would cross multiple drinking water supply sources, 3 watersheds, and 289 waterbodies.²⁷ Many of the streams the pipeline would cross provide critical habitats, including for trout or trout spawning.²⁸ In New York alone, Project construction would disturb 3,161 linear feet of streams and result in a total of 5.09 acres of stream disturbance impacts.²⁹ At least 95.3 acres of wetlands also would be impacted.³⁰

II. ENVIRONMENTAL IMPACTS OF THE PROJECT

A. Impacts of Induced Natural Gas Development

Providing increased transportation capacity to Susquehanna County is likely to spur additional development of natural gas wells in the area. The Project would

²⁴ *Id.* at 2-4, 2-8 [JA194, 198].

²⁵ *Id.* at 4-71 [JA375] ("Interior forest has a higher habitat value for some wildlife species, may take decades to establish, and is generally considered more rare in the environment compared to edge forest which has a lower habitat value for many species and can be created immediately with disturbance.").

 $^{^{26}}$ *Id.* at 4-83–4-85 [JA387–88].

²⁷ *Id.* at 4-36–4-37, 4-51, 4-62 [JA340–41, 355, 366].

²⁸ NYSDEC Denial at 3–4 [JA2407–08].

²⁹ *Id.* [JA2407–08].

³⁰ FEIS at ES-5 [JA163].

provide a 650,000-dekatherm-per-day conduit from Susquehanna County to the markets of the Northeast for at least the next 15–20 years.³¹ Cabot has contracted to supply more than three-quarters of that amount but also has significant additional long-term supply commitments with other entities. For example, Cabot has a 20-year contract to supply approximately 350,000 dekatherms of natural gas per day to a liquefied natural gas export terminal in Maryland.³² Cabot also has reported a deal to provide 500,000 million British thermal units per day on the Atlantic Sunrise Pipeline,³³ and will supply UGI Energy with a combined 250,000 dekatherms per day of Marcellus Shale natural gas for two projects in Pennsylvania.³⁴ Cabot has an additional deal to provide 525 million cubic feet of new capacity to the Leidy Southeast expansion project.³⁵ Earlier this month, Cabot announced another deal to supply over 400,000 dekatherms of natural gas per day directly to two new power plants in Pennsylvania.³⁶ These commitments,

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 $^{^{31}}$ *Id.* at ES-1 [JA159]; *see* Authorization Order ¶ 14 [JA010].

³² Press Release, Cabot Oil & Gas Corporation Provides Corporate Update, Announces Agreement to Provide Natural Gas to Dominion Cove Point LNG Terminal (Dec. 19, 2013), http://goo.gl/xEwJpy.

News Release, Cabot Oil & Gas Corporation Announces New Agreements for Long-Term Sales and Pipeline Takeaway (Feb. 20, 2014), http://goo.gl/FC92yp.

34 UGI Energy Completes Two Marcellus Pipeline Projects, Pittsburgh Post-

Gazette (Nov. 24, 2014), http://goo.gl/8sywDs.

³⁵ Jamison Cocklin, *Cabot to Cut Back as Profits Fall Despite Soaring Liquids Production*, Natural Gas Intelligence (Apr. 24, 2015), http://goo.gl/Dl4cXS.

³⁶ Cabot Oil & Gas Locks in 10-Year Exclusive Gas Supplier Contract with Power Plant in Pennsylvania, Oil & Gas, 360 (July 5, 2016), http://goo.gl/f0xMC3.

combined with the typical steep decline in the rates of well production,³⁷ make it highly unlikely that Cabot's existing wells would produce enough to meet its Project demand. The Project therefore likely would spur additional production of natural gas in the Marcellus Shale, ³⁸ which would have a wide range of environmental impacts.

Continuing to expand shale gas development poses "a real risk of serious environmental consequences." As NYSDEC concluded after five years of studying the relevant scientific literature, adverse effects of using hydraulic fracturing to stimulate shale gas production include:

1) air impacts that could affect respiratory health due to increased levels of particulate matter, diesel exhaust, or volatile organic chemicals; 2) climate change impacts due to methane and other volatile organic chemical releases to the atmosphere; 3) drinking water impacts from underground migration of methane fracturing fluid chemicals associated with faulty well construction or seismic activity; 4) surface spills potentially resulting in soil, groundwater, and surface water contamination; 5) surface water contamination inadequate resulting from wastewater treatment; 6) earthquakes and creation of fissures induced during the hydraulic fracturing stage; and 7) community

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³⁷ See SA Transcripts, Cabot Oil & Gas Dan O. Dinges on Q1 2016 Results— Earnings Call Transcript, Seeking Alpha (Apr. 29, 2016), http://goo.gl/3QJeaL (acknowledging "lower production levels" and "meaningful supply declines across North America...[and] in our operating area").

³⁸ *Id.* (forecasting growth in 2017 and "a further acceleration of our growth rate in 2018 in anticipation of timely in-service of [] various infrastructure projects").

³⁹ Sec'y of Energy Advisory Bd., Shale Gas Production Subcommittee Second Ninety-Day Report, 10 (Nov. 8, 2011), http://goo.gl/pMoEjf.

character impacts such as increased vehicle traffic, road damage, noise, odor complaints, and increased local demand for housing and medical care.⁴⁰

Additional well development has the potential to industrialize the once-rural communities of Susquehanna County and the surrounding areas. ⁴¹ The affected communities would face serious risks of gas leaks, increased traffic, and air pollution from compressor stations and other sources. ⁴² New gathering pipelines connecting new wells to the Project would carve additional routes through forest habitats, agricultural lands, and rural communities, and also carry environmental consequences. Clearing and maintaining pipeline routes disturbs the land, and discharges dust, dirt, and rocks that can pollute waterways. ⁴³

B. Impacts of Greenhouse Gas Emissions

Both the Project and its induced upstream development would result in significant climate impacts. Fugitive emissions of methane, a greenhouse gas at

<u>https://hip.phmsa.dot.gov/analyticsSOAP/saw.dll?Portalpages</u> (reporting 323 significant pipeline incidents in 2015 alone.).

⁴⁰ NYSDEC, Final Supplemental Generic Environmental Impact Statement, Executive Summary at 2 (May 13, 2015), http://goo.gl/juW9nE; see U.S. Dep't of Energy, Addendum to Environmental Review Documents Concerning Exports of Natural Gas from the United States (drft. May 29, 2014), http://goo.gl/RoOOiF.

⁴¹ DEIS Comments at 15–17 [JA1693–95].

⁴² See Pipeline and Hazardous Material Safety Administration, U.S. Dep't of Transp., Significant Pipeline Incidents,

⁴³ See Marc Henderson Professional Review & Comments on DEIS, 15 (Apr. 17, 2014), attached as Ex. A to DEIS Comments [JA1721].

least 25 times more potent than carbon dioxide, 44 is a major source of climate change impacts from natural gas pipelines and associated facilities.⁴⁵

The Commission estimated that the Project would emit 60,881.9 tons per year of greenhouse gases from construction and 209,963 tons per year from operation.⁴⁶ That calculation excludes emissions caused by the loss of forest and other vegetation, which store significant amounts of carbon dioxide, and accounts for only one year of Project operation.⁴⁷ Using the social cost of carbon,⁴⁸ a tool that the Environmental Protection Agency ("EPA") and other federal and international bodies use to monetize the climate effects of proposed actions for ready comparison to a project's claimed economic benefits, the estimated climate change damages caused by the Project's operation over only 15 years, excluding emissions from induced upstream natural gas development, would be at least \$25 million and may be as high as \$127 million.

⁴⁴ EPA, Overview of Greenhouse Gases, https://goo.gl/3eB2RT.

⁴⁵ See, e.g., Matthew R. Harrison et al., Natural Gas Industry Methane Emission Factor Improvement Study Final Report, 12 (Dec. 2011), http://goo.gl/fzUf0C (report commissioned by U.S. EPA finding significant generation of fugitive methane emissions by natural gas production and transportation).

⁴⁶ See FEIS at 4-181–4-183 [JA485–87]; see also Rehearing Request at 20–21 [JA2011-12].

⁴⁷ See FEIS at 4-181–4-183 [JA485–87].

⁴⁸ The social cost of carbon assigns a dollar cost to the emission of one metric ton of CO₂ in order to better understand the effects of continuing to increase the concentration of GHGs in the atmosphere. Intergovernmental Panel on Climate Change, Social, Economic and Ethical Concepts and Methods, Contribution of Working Group III to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change, 249 (2014), http://mitigation2014.org/report/publication/.

C. Impacts on Water Quality

The Project has the potential to cause significant impacts to water quality at each of its 289 watercrossings, as well as through disturbance of wetlands and removal of tree cover surrounding waterways. The extent of the environmental impacts from the crossings would vary significantly depending on the pipeline installation method used at each location.⁴⁹ The two main types of crossing discussed in the FEIS are: trenchless—where a tunnel-like shaft is dug under the waterway, and the flow of the waterway should be left undisturbed—and trenched—where a trench is dug through the bed of the waterbody, either by diverting the water flow (dry method) or simply digging through the stream (wet method).⁵⁰

Constitution has proposed but is not required to use trenchless crossing methods for 21 of the crossings and dry trenched crossing methods for the remaining 268 waterbodies.⁵¹ Trenchless crossings have comparatively fewer environmental impacts than other methods of crossing.⁵² Dry trenched crossings require significant disturbance to existing stream beds, cause at least temporary destruction of in-stream habitats, and in some cases degrade habitats for many

⁴⁹ FEIS at 4-56 ("The potential impacts on waterbodies associated with the use of...trenchless crossing methods are considered minimal when compared to other crossing methods.) [JA360].

⁵⁰ *Id.* at 2-21–2-22 [JA211–12].

⁵¹ *Id.* at ES-4 [JA162]; Authorization Order ¶ 77 [JA029].

⁵² NYSDEC Denial at 8 [JA2412]; FEIS at 4-56 [JA360].

years.⁵³ FERC did not require that Constitution provide site-specific information to determine what method of crossing was feasible at each stream or what impacts would result from the method proposed for each location.

Impacts on water quality and aquatic habitat also can be caused by clearing the vegetation on the banks of the waterways and removing trees surrounding the waterbodies. "Loss of riparian vegetation that shades streams from the warming effects of the sun will likely increase water temperatures, further limiting habitat suitability for cold-water aquatic species such as brook trout."⁵⁴ Cutting down trees and otherwise disturbing stream banks increases runoff and erosion and makes more intense flooding events more likely. ⁵⁵ Changes in runoff patterns also can alter the basic shape and flow of waterways. ⁵⁶

Although FERC's prerequisites for Project activity in New York have not been met, tree cutting and impacts to at least one water body appear already to have occurred. The New York Attorney General conducted an in-depth investigation and found that "Constitution expressly or tacitly authorized, encouraged and/or condoned the tree and vegetation cutting, clear-cutting, and other ground disturbance activities within the pipeline right of way in New York on which Constitution holds easements for the sole purpose of constructing and

⁵³ NYSDEC Denial at 4, 8 [JA2408, 2412].

⁵⁴ *Id.* at 4 [JA2408].

⁵⁵ *Id.* [JA2408].

⁵⁶ See id. [JA2408].

operating the pipeline."⁵⁷ To date, the Commission has not taken any action regarding the AG Complaint.

SUMMARY OF THE ARGUMENT

FERC's review of the environmental consequences of the Project did not adhere to the requirements of NEPA. Congress enacted NEPA "to promote efforts which will prevent or eliminate damage to the environment and biosphere and stimulate the health and welfare of man." 42 U.S.C. § 4321. "NEPA promotes its sweeping commitment...by focusing Government and public attention on the environmental effects of proposed agency action. By so focusing agency attention, NEPA ensures that the agency will not act on incomplete information, only to regret its decision after it is too late to correct." *Marsh v. Or. Natural Res.*Council, 490 U.S. 360, 371 (1989) (internal citations omitted). NEPA is designed to require that federal agencies take a "hard look" at all the environmental consequences of their decisions. *Sierra Club v. Peterson*, 717 F.2d 1409, 1413 (D.C. Cir. 1983).

Despite NEPA's clear purpose and goals, the Commission approved the Project without analyzing one of its most significant impacts—indirect effects on communities and the environment in the nearby region that would supply the gas

⁵⁷ Complaint and Petition by Office of the New York Attorney General Against Constitution Pipeline LLC for Violations of Law and the Order Issuing Certificates of Public Convenience and Necessity, FERC Docket CP13-499-000, 2 (May 13, 2016) ("AG Complaint") [JA2253].

over the life of the pipeline. Although touting the pipeline's ability to give a particular supply area access to new natural gas demand centers, the Commission nevertheless refuses to admit that serving that demand over time likely will require suppliers to develop additional natural gas wells.⁵⁸ The Commission also claimed that analyzing the impacts of increased natural gas development is too speculative, despite a raft of available reports, studies, and tools at its disposal, including its own FEIS, which calculated the number of wells needed and the associated acreage disturbed to supply the Project.⁵⁹ FERC's approval of the Project, after burying its head in the sand and refusing to provide even a general overview of the reasonably foreseeable impacts of induced gas production, was arbitrary and capricious. No meaningful analysis of those adverse effects could support the conclusion that Project impacts would be mitigated to the point of insignificance.

The Commission also arbitrarily refused to calculate the full volume of the Project's greenhouse gas emissions. FERC's estimates neglected important sources of emissions and treated the Project as a one-year temporary installation, instead of a major infrastructure project that likely would operate and emit greenhouse gases for decades.⁶⁰ Moreover, FERC refused to evaluate the *impacts*

⁵⁸ FEIS at 1-2, 3-16 [JA174, 175]; Authorization Order ¶¶ 100–01 [JA035–36]; Rehearing Order ¶ 138 [JA115–16].

⁵⁹ Authorization Order ¶ 101, 107 [JA036,038]; see FEIS at 4-233 [JA539].

⁶⁰ FEIS at 4-181–4-183, 4-186 [JA485–87, 490].

of even the emissions it did recognize.⁶¹ Tools exist to assist with this evaluation, including the social cost of carbon. Because FERC declined to use that or any other tool to meaningfully evaluate the Project's climate-change impacts, it unlawfully failed to disclose significant harms associated with the Project.

In addition, FERC did not secure enough information to determine the impacts of the Project's 289 stream crossings. Without the benefit of feasibility studies or any other empirical support, the Commission accepted Constitution's claim that trenchless crossing—the least environmentally damaging method of crossing—was possible at only a handful of locations. ⁶² In contrast with NYSDEC, which denied Constitution's application for a 401 Certification for lack of information on what crossing method would be used where and what impacts would result, ⁶³ FERC arbitrarily concluded that the Project's potentially significant impacts to water quality would be "localized and short-term" and could be adequately mitigated. ⁶⁴ By basing its NEPA analysis on incomplete information and unsubstantiated assumptions about mitigation measures, the Commission violated NEPA's hard look standard.

Finally, the Commission failed to comply with the Clean Water Act when it prematurely approved the Project without waiting for New York State to make a

⁶¹ Rehearing Order ¶¶ 130–31 [JA112–13].

⁶² See FEIS at 2-24, 4-50 [JA214, 354].

⁶³ NYSDEC Denial at 1 [JA2405].

⁶⁴ FEIS 4-244–2-245 [JA550–51].

decision on the 401 Certification. Case law confirms the statute's plain language requiring a decision under Section 401 before final federal agency action is taken. The circumstances here illustrate why this ordering is critical: because the Commission jumped the gun, landowners were stripped of property through eminent domain and swaths of trees were cut down in Pennsylvania—only to learn that the pipeline could not be built because NYSDEC denied the Project's 401 Certification. FERC's premature issuance of the Authorization Order misled landowners, who—encouraged to believe that construction was inevitable and imminent—cut down trees and damaged a waterway in New York. 65 Section 401 seeks to prevent this gratuitous destruction by prohibiting federal approval of any project that might discharge into a state's navigable waters without first allowing that state to determine whether the project would comply with the Clean Water Act. The Commission ignored this requirement and violated the Clean Water Act.

ARGUMENT

I. FERC UNLAWFULLY REFUSED TO CONSIDER EFFECTS OF PROJECT-INDUCED NATURAL GAS PRODUCTION.

FERC failed to take a hard look at the reasonably foreseeable impacts of increased gas production that would result from linking the Marcellus Shale in Susquehanna County to a new market for 650,000 dekatherms per day of natural gas. Even if existing wells could satisfy the demand in the short-term, there is

⁶⁵ See AG Complaint at ¶¶ 46–49 [JA2272–74]; NYSDEC Denial at 2 [JA2406].

nothing in the record before FERC demonstrating that current production levels will last for 15 years or longer. To the contrary, production rates will decline over time, forcing the pipeline's main supplier, Cabot, to develop new wells to fulfill significant existing long-term commitments and Project requirements. The impacts of additional natural gas development in Susquehanna County likely would be substantial, particularly in light of the development that already has occurred there, and must be evaluated under NEPA.

A. NEPA Requires that FERC Analyze the Indirect Effects of the Project.

NEPA mandates that all the direct and indirect environmental effects of the Project and their significance be considered in the FEIS. *See* 40 C.F.R. § 1502.16.66 FERC's analysis must include "growth inducing effects and other effects related to induced changes in the pattern of land use...and related effects on air and water and other natural systems, including ecosystems." *Id.* §1508.8(b); *see also Natural Res. Def. Council v. Fed. Aviation Admin.*, 564 F.3d 549, 560 (2d Cir. 2009) (recognizing NEPA requirement to consider environmental impacts of induced growth). Implicit in this requirement is a duty to engage in "reasonable forecasting." *Scientists' Inst. for Pub. Info., Inc. v. Atomic Energy Comm'n*, 481

⁶⁶ Direct effects "are caused by the action and occur at the same time and place" and indirect effects "are caused by the action and are later in time or farther removed in distance, but are still reasonably foreseeable." 40 C.F.R. § 1508.8(a)–(b).

F.2d 1079, 1092 (D.C. Cir. 1973) ("Reasonable forecasting and speculation is...implicit in NEPA, and we must reject any attempt by agencies to shirk their responsibilities under NEPA by labeling any and all discussion of future environmental effects as 'crystal ball inquiry.'"). An effect is reasonably foreseeable if it is so "likely to occur that a person of ordinary prudence would take it into account in reaching a decision." *Mid States Coal. for Progress v. Surface Transp. Bd.*, 345 F.3d 520, 549 (8th Cir. 2003) (internal quotation and citation omitted); *see Brady Campaign to Prevent Gun Violence v. Salazar*, 612 F. Supp. 2d 1, 21–22 (D.D.C. 2009) (finding that NEPA required the agency to analyze the foreseeable consequences that would occur as a result of the agency action).

Under this standard, courts have required agencies evaluating energy infrastructure projects to analyze indirect effects of construction and operation. *Mid States*, 345 F.3d at 549–50; *Border Power Plant Working Grp. v. Dep't of Energy*, 260 F. Supp. 2d 997, 1017, 1028–29 (S.D. Cal. 2003). In *Mid States*, the Eighth Circuit found that NEPA required that the adverse air quality effects of burning coal be considered as an indirect effect of building a railroad that provided a more direct route for coal transport to coal-burning electricity generating units. 345 F.3d at 549. In *Border Power*, the court required that the emissions from a power plant in Mexico, which would export electricity to the United States over a proposed transmission line, had to be considered in the NEPA

review of the transmission line. 260 F. Supp. 2d at 1030. FERC thus must analyze the upstream development that would be reasonably likely to occur because of the Project.⁶⁷

B. The Project Likely Would Cause Additional Natural Gas Production.

The Project would give Constitution's suppliers, in particular Cabot, a direct new connection between a specific supply area and Northeastern regional demand. Constitution told the Commission that the Project would "provide [the Northeast with] access to new sources of gas supply." The FEIS further explained that there is little existing pipeline system in the direct vicinity of the Project's "Susquehanna Supply Area" and none that goes toward the Northeast markets. FERC concluded in the FEIS that "even if additional pipeline was constructed for purposes of connecting [the existing system] to the supply area and the delivery area, there still

⁶⁷ See Rehearing Order ¶ 138 [JA115–16]. FERC wrongly contends that it was not required to consider the impacts of induced natural gas development as it had no ability to prevent those impacts because state regulatory authority over production leaves the Commission powerless to prevent those impacts. See id. ¶¶ 134 (citing Dep't of Transp. v. Public Citizen, 541 U.S. 752, 770 (2004)), 137, 139 [JA114–16]. Unlike in Public Citizen, where the agency "ha[d] no ability to prevent a certain effect due to its limited statutory authority," 541 U.S. at 770, FERC can in fact prevent the effects of upstream development by simply refusing to approve the Project. When an agency has authority to prevent the relevant effects—as FERC does with respect to the impacts of Project-induced gas production—"Public Citizen's limitation on NEPA does not apply." Or. Natural Res. Council Fund v. Brong, 492 F.3d 1120, 1134 n. 20 (9th Cir. 2007).

⁶⁸ Application at 5 [JA994].

⁶⁹ FEIS at 3-15–3-16 [JA239–40].

is not sufficient available capacity on any of these existing pipeline systems to meet the proposed pipeline project's required delivery of natural gas."⁷⁰ Although the Commission claimed in the Rehearing Order that it is reasonable to assume that natural gas from the Susquehanna Supply Area would find its way to market through other pipelines, this assumption has no support in the record and is in direct contradiction of the findings in the FEIS and Constitution's statements in its Application.⁷¹

The Project therefore is fundamentally different than the pipeline at issue in *Coalition for Responsible Growth & Resource Conservation v. FERC*, where this Court found an insufficient causal connection between the pipeline and future natural gas development to warrant assessment of production impacts. 485 F. App'x 472 (2d Cir. 2012). Unlike here, where the Project links the Susquehanna Supply Area to new markets, the MARC I pipeline merely connected existing pipelines for more efficient transport of natural gas already in the federal transmission system. *Id.*

It is reasonably foreseeable that connecting the Susquehanna Supply Area to the Northeast market's demand would result in more wells being drilled in the supply area over the life of the Project. While Constitution claims that there is enough ongoing production to supply the Project, there is nothing in the record to

⁷⁰ *Id.* [JA239–40].

⁷¹ See Rehearing Order ¶ 147 [JA120].

demonstrate that existing production will be sufficient to supply the Project for decades. Numerous reports suggest that output from unconventional natural gas wells drops sharply after the first few years of production. One report documented as much as a 60–80 percent decline after a single year. Therefore, in order to maintain existing levels of production, producers very likely would have to develop additional wells.

Specifically, it is highly improbable that Cabot can supply the Project with 500,000 dekatherms per day over the life of the Project without drilling new wells. Cabot has extensive existing long-term commitments to markets that will not be served by the Project.⁷⁵ There is no record evidence that Cabot already has drilled enough wells to meet its current commitments *and* contribute 500,000 dekatherms per day into the Project.⁷⁶ Moreover, EPA regulations and significant cost savings make it very likely that new wells needed for the Project would be located near the Project.⁷⁷ FERC's continuing refusal to acknowledge the clear connection between the Project and increased natural gas production is arbitrary and capricious. *See*

⁷² Rehearing Request at 11 [JA2002].

⁷³ *Id.* at 11 n.17 [JA2002].

⁷⁴ The Commission's reference to overall production for the entire state of Pennsylvania does not contradict this reality as it does not speak to the production levels in the Susquehanna Supply Area that would be served by the Project. *See* Rehearing Order ¶ 148 [JA121].

⁷⁵ See supra Statement of Facts at II.A.

⁷⁶ See Rehearing Request at 9–11 [J2000–02].

⁷⁷ *Id.* at 8–11 [JA1999–2002].

Motor Vehicle Mfrs. Ass'n of U.S., Inc. v. State Farm Mut. Auto. Ins. Co., 463 U.S. 29, 52 (1983) ("The agency must explain the evidence which is available, and must offer a "rational connection between the facts found and the choice made.") (internal quotation omitted); Potomac Alliance v. U.S. Nuclear Reg. Comm'n, 682 F.2d 1030, 1035–36 (D.C. Cir. 1982) (noting that a "complete environmental assessment would have to extend throughout the period" of reasonably foreseeable impacts).

That some natural gas production might occur in the area without the Project does not excuse FERC's refusal to consider the effects of the increased production that likely would result from the Project. Nothing in NEPA limits the requirement to evaluate the indirect effects of a project's induced development to those situations where the project is responsible for causing all, as opposed to some, of the development in the area. *See e.g.*, *Border Power*, 260 F. Supp. 2d at 1013 (requiring agency to analyze environmental consequences of generating the additional electricity to be carried on lines of proposed transmission projects). Nor is FERC excused from evaluating the impacts of reasonably foreseeable development spurred by the Project simply because it is possible that some future unknown project also might cause additional development in the Susquehanna Supply Area. Petitioners have established a sufficient causal connection between

⁷⁸ *See* Rehearing Order ¶ 138 [JA115–16].

the Project and additional natural gas development to require that FERC analyze the impacts of that development under NEPA. *See Mid States*, 345 F.3d at 549–50.

C. FERC Unlawfully Concluded that Impacts from Induced Growth in Gas Production Are Too Speculative to Be Analyzed.

FERC also refused to consider the impacts of Project-induced natural gas development on the grounds that the exact location, scale, and timing of future well development were unknown. But FERC arbitrarily failed to acknowledge or make use of readily-available models, tools, and other information sources that would enable the Commission to consider at least some, if not all, of the impacts of additional natural gas production and transportation that would be caused by the Project.

Despite its claims to the contrary, FERC actually had considerable information on where and when well development would take place, as well as how many wells would be required to supply the Project. FERC admitted in briefing to this Court that it was aware of the general location of where the development would occur;⁸⁰ and the location of Cabot's holdings in the area is well-known. The Commission's own FEIS also quantified the number of wells needed to supply the Project—at least in the short term.⁸¹ The Commission could

 $^{^{79}}$ *Id.* ¶¶ 139, 151–52 [JA116, 122–123]; Authorization Order ¶¶ 101, 107 [JA036, 038].

⁸⁰ Resp'ts Opp'n to Emergency Mot. for Stay Pending Review, 11 (Feb. 12, 2016). ⁸¹ *See* FEIS at 4-233 [JA539].

have coupled this information with widely-available data on the average rate of decline in well production and engaged in reasonable forecasting about the timing of well development. See Scientists' Inst. for Pub. Info., Inc., 481 F.2d at 1092.

Moreover, knowledge of the *exact* location, timing, and scale of well development is not necessary for FERC to meaningfully evaluate the range of potential impacts from that activity. Without that information, FERC already had calculated how much acreage would be affected by drilling the wells needed to feed the Project.⁸³ In addition, the adverse air and climate impacts of natural gas development occur at a regional and global level and therefore can be evaluated without knowing precisely where the well pads will be located.

The Commission also was well aware of tools that could be used to project other potential effects of additional natural gas development.⁸⁴ For example, the study FERC cited to determine the approximate acreage that would be affected by the wells needed to fill the Project also contains a robust description of other impacts associated with natural gas production and transportation in the Marcellus Shale.⁸⁵ These type of studies should have allowed FERC to discuss the wide array

⁸² See Rehearing Request at 11 [JA2002].

⁸³ FEIS at 4-233 [JA539].

⁸⁴ See, e.g., Rehearing Request at 8 [JA1999].

⁸⁵ See NYSDEC, Revised Draft Supplemental Generic Environmental Impact Statement on the Oil, Gas, and Solution Mining Regulatory Program (2011), http://www.dec.ny.gov/data/dmn/rdsgeisfull0911.pdf; see also FEIS at 4-233 [JA539].

of the effects associated with Project-induced natural gas development, even if details contingent upon precise well locations remained uncertain. *See Mid States*, 345 F.3d at 549 ("[W]hen the nature of the effect is reasonably foreseeable but the extent is not...[an] agency may not simply ignore the effect.").

FERC nevertheless remained adamant that such impacts are too "nebulous" to require consideration under NEPA. ⁸⁶ In the face of some uncertainty, however, it is not permissible for FERC to bury its head in the sand. *See Ctr. for Biological Diversity v. Bureau of Land Mgmt.*, 937 F. Supp. 2d 1140, 1159 (N.D. Cal. 2013) (NEPA requires further collection of data where doing so would resolve uncertainty or prevent speculation on potential effects); *see also Barnes v. U.S. Dep't of Transp.*, 655 F.3d 1124, 1136 (9th Cir. 2011) (agencies cannot justify refusal to consider indirect effects with conclusory allegations). FERC should have acknowledged the limitations of the available data and either calculated and evaluated a possible range of impacts or developed a worst-case scenario. *See Save Our Ecosystems v. Clark*, 747 F.2d 1240, 1249 (9th Cir. 1984); 40 C.F.R. §1502.22(a). FERC's refusal to evaluate the significant environmental and health

⁸⁶ Rehearing Order ¶ 139 [JA116]. FERC, however, attempted to dismiss the climate impacts of natural gas production based on the Department of Energy's contention that there is a net positive impact when replacing generation of energy from more carbon-intensive fossil fuels with energy generation from natural gas. There is no support in the record here that the natural gas from the Project would be used to offset the burning of more carbon-intensive fuels. *See id.* ¶ 140 [JA116–17].

impacts of increased natural gas production in the supply area was arbitrary and capricious. *See, e.g., State Farm*, 463 U.S. at 52; *Natural Res. Def. Council, Inc. v. U.S. Dep't of Agric.*, 613 F.3d 76, 83 (2d Cir. 2010) (finding that an agency's action will be set aside if the agency "entirely failed to consider an important aspect of the problem").

II. FERC FAILED TO EVALUATE THE PROJECT'S GREENHOUSE GAS EMISSIONS AND CLIMATE IMPACTS.

The Council on Environmental Quality ("CEQ"), the entity charged with ensuring that federal agencies meet their NEPA obligations, has stated that "[c]limate change is a fundamental environmental issue, and the relation of Federal actions to it falls squarely within NEPA's focus." CEQ acknowledges that assessing climate change "is a particularly complex challenge" but reminds federal agencies such as FERC that "analyzing the proposed action's climate change impacts and the effects of climate change relevant to the proposed action's environmental outcomes can provide useful information to decisionmakers and the public and should be very similar to considering the impacts of other environmental stressors under NEPA." FERC nevertheless consistently has refused to update its approach to analyzing climate impacts under NEPA. The Commission repeatedly has pointed to uncertainties in existing climate science and

⁸⁸ *Id.* [JA2370].

⁸⁷ CEQ, Revised Draft Guidance for Greenhouse Gas Emissions and Climate Change, 2 (drft. Dec. 2014) ("CEQ Climate Guidance") [JA2370].

methodologies to justify ignoring key climate impacts from the natural gas projects it approves.⁸⁹

FERC's analysis of the Project's climate impacts failed the hard look standard and was arbitrary and capricious for three reasons. First, the Commission arbitrarily refused to consider the full volume of the Project's greenhouse gas emissions. Second, FERC improperly dismissed the potential significance of the Project's emissions based on their volume relative to greenhouse gas emissions from major U.S. sources. Third, the Commission refused to meaningfully consider the impacts of the Project's greenhouse gas emissions on the human environment.

A. FERC Arbitrarily Ignored Significant Greenhouse Gas Emissions from the Project.

The FEIS' estimates of the Project's greenhouse gas emissions arbitrarily covered only one year of operation and neglected to include an important source of

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 $^{^{89}}$ See e.g., Dominion Cove Point LNG, LP, 151 FERC \P 61,095, \P 54 (May 4, 2015).

emissions.⁹⁰ The Commission appears to have concluded that constructing the Project would emit 60,881.9 tons of carbon dioxide equivalent ("CO₂e") and operating the Project would have emitted approximately 181,942 tons annually.⁹¹ Using a very conservative estimate of a 15-year Project life, the Project greenhouse gas emissions for construction and of operation therefore would be 2,790,011.9 tons of CO₂e—a significantly higher volume than the FEIS disclosed.

The Commission also severely underestimated the Project's greenhouse gas emissions because it ignored emissions from cutting down trees and destroying other vegetation in the Project's 100 foot-wide right-of-way. Trees and other vegetation act as carbon sinks and authorities such as CEQ and the Intergovernmental Panel on Climate Change have long identified the loss of carbon

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https://www3.epa.gov/climatechange/glossary.html#C.

⁹⁰ FERC's calculations of the Project's greenhouse gas emissions are difficult to follow. The FEIS uses different units of measurement across its discussion of greenhouse gas. Within the FEIS, some of the greenhouse gas emissions are calculated in terms of CO₂e and others are estimated in terms of carbon dioxide. Still other greenhouse emissions in the FEIS are listed simply as "GHGs", without indicating what unit is being used. FEIS at 4-181 [JA485]. There are different kinds of greenhouse gases that have varying potential to warm the planet when present in the atmosphere. In order to combine emissions of different types of greenhouse gases into a single total, these emissions are measured in units of CO₂e. *See* EPA, Glossary of Climate Change Terms,

Onstruction emissions were derived by adding the 60,857.7 tons and 25.2 tons noted at FEIS 4-181 [JA485] and assuming that the units used are in CO₂e. *See supra* note 90. Emissions from operations were derived by adding the 4,997 tons per year of CO₂e from pipeline operation noted at FEIS 4-182 [JA486] and the 176,945 tons per year of CO₂e noted at FEIS 4-183 [JA487].

sinks as a critical factor in exacerbating climate change. The FEIS omitted any discussion of greenhouse gas emissions from lost carbon sinks, stating that there are "two governmental sources which acknowledge such emissions, but neither source provides a reliable method to calculate them." The Commission went on to complain that CEQ's Climate Guidance "states that [greenhouse gas] estimation tools have become widely available but cites only to the U.S. Department of Agriculture's...tool", which the Department of Agriculture acknowledges has some weaknesses.

The Commission's response missed the point of NEPA entirely. If the tool referred to in CEQ's Climate Guidance was not to FERC's liking, the Commission was free to select another instrument of its choice. The burden, however, was not on Petitioners or CEQ to produce FERC's tool of choice for mandatory NEPA analysis. *Ill. Commerce Comm'n v. I.C.C.*, 848 F.2d 1246, 1258 (D.C. Cir. 1988) ("The Commission may not delegate to parties and intervenors its own responsibility to independently investigate and assess the environmental impact of the proposal before it."); *Calvert Cliffs' Coordinating Comm., Inc. v. Atomic Energy Comm'n*, 449 F.2d 1109, 1118–19 (D.C. Cir. 1971). NEPA required that FERC "gather information and do independent research when missing information

⁹² Rehearing Request at 21 [JA2012].

⁹³ Rehearing Order ¶ 128 [JA110–11].

⁹⁴ *Id.* at n.198 [JA110–11].

is 'important', 'significant', or 'essential' to a reasoned choice among alternatives." *See Save Our Ecosystems*, 747 F.2d at 1244 n. 5, 1248–49; 40 C.F.R. § 1502.22(a). FERC did not show that no tool exists for analyzing greenhouse emissions from the loss of trees and vegetation or that it would be prohibitively expensive for the Commission to find such a tool. *See* 40 C.F.R. § 1502.22(b) (excusing need to address incomplete information if the costs of doing so are exorbitant). Indeed, the Department of Agriculture's report that the Commission cited to "attempts to delineate methods [to estimate greenhouse emissions from sinks] that balance user-friendliness, data requirements, and scientific rigor in a way that is transparent and justified" and offers a variety of suggestions for estimating emissions from disturbances to forests, as well as wetlands. 95

NEPA also does not permit FERC to throw up its hands in the face of uncertainty and refuse to analyze potential environmental impacts. Uncertainties and ranges in values must be acknowledged, and FERC could have disclosed the limitations of the available tools rather than refuse to use them. *See Ctr. for Biological Diversity v. Nat'l Hwy. Traffic Safety Admin.*, 538 F.3d 1172, 1201 (9th Cir. 2008) (noting that a National Academy of Sciences committee "acknowledged"

⁹⁵ U.S. Dep't of Agric., USDA Technical Bulletin 1939, Quantifying Greenhouse Gas Fluxes in Agriculture and Forestry: Methods for Entity-Scale Inventory, ES-3, ES-5–6 (Marlen Eve et al. eds., 2014), http://goo.gl/1PX8za.

the wide range of values" but nevertheless selected one). The Commission also could have addressed the uncertainty by performing a worst-case analysis. *See Save Our Ecosystems*, 747 F.2d at 1258. At a minimum, it was certain that the greenhouse gases emitted by cutting hundreds of acres of trees could not be zero—which was what the FEIS assumed by failing to address this source of emissions entirely.

B. FERC Improperly Discounted the Project's Greenhouse Gas Emissions Based on Their Relative Contribution to National and Global Emissions.

The Commission's analysis of climate impacts unlawfully dismissed the impacts of the Project's greenhouse gas emissions because these emissions would be "very small" or "negligible" when compared with the U.S. Greenhouse Gas Inventory or the global inventory. See Natural Res. Def. Council, Inc. v. Callaway, 524 F.2d 79, 88 (2d Cir. 1975) (recognizing Congress' intent in passing NEPA to require analysis of small amounts of pollution that can have significant cumulative effects). FERC's dismissal of the Project's greenhouse gas emissions reflected a fundamental misunderstanding of the problem of climate change, which EPA has emphasized "is a global problem resulting from the emissions of many

⁹⁶ FEIS at 4-256 [JA562].

individual sources whose impacts are cumulative." CEQ specifically has urged agencies to reject the line of reasoning FERC employed in the FEIS: "[T]he statement that emissions from a government action or approval represent only a small fraction of global emissions is more a statement about the nature of the climate change challenge, and *is not an appropriate basis for deciding whether to consider climate impacts under NEPA*." EPA also recommended that FERC not allow applicants to compare their greenhouse gas emissions to total state, national, or global emissions. ⁹⁹

The Commission's subsequent attempts to distance itself from the FEIS' flawed evaluation of the Project's greenhouse gas emissions are unavailing. FERC claimed in the Rehearing Order that the FEIS' "conclusions about impact significance [of the Project's greenhouse gas emissions] do not rely on this comparison." Nothing in the FEIS supports this assertion. The FEIS

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¹⁰⁰ Rehearing Order ¶ 129 [JA111–12].

⁹⁷ EPA Comments on the Draft Guidance Manual for Environmental Report Preparation for Applications Filed Under the Natural Gas Act, 3, attached to Letter from Karin Leff, EPA, to Kimberly Bose, FERC (Jan. 19, 2016) ("EPA Guidance Comments") [JA2403].

⁹⁸ CEQ Climate Guidance at 9 (emphasis added) [JA2377].

⁹⁹ EPA Guidance Comments at 3 [JA2403]; EPA Comments, Constitution Pipeline and Wright Interconnection Projects Final Environmental Impact Statement (FERC EIS 0249F), 1, attached to Letter from Judy-Ann Mitchell, EPA to Kimberly Bose, FERC (Dec. 08, 2014) ("EPA Comments on FEIS") [JA1988].

contained no explanation for FERC's conclusion that the Project's greenhouse gas emissions are insignificant other than the improper comparison.

C. The Commission Did Not Evaluate the Potential Climate Change Impacts from the Project's Greenhouse Gas Emissions.

FERC also failed to evaluate the potential climate impacts of the Project's greenhouse gas emissions, claiming that there was no standard methodology for determining how incremental Project emissions result in physical effects on the global environment. As EPA clearly has articulated, however, FERC is wrong. Numerous tools exist to measure the incremental effect of a project's greenhouse gas emissions.

In comments on the FEIS, EPA specifically noted that using the social cost of carbon is

a standard methodology for monetizing the damages associated with relatively small incremental contributions to [greenhouse gas] emissions and their physical effects on the global environment. These social cost of carbon estimates account for uncertainty in many dimensions through probabilistic analysis, multi-model comparisons,

¹⁰¹ The conclusion section in the FEIS' assessment of Air Quality and Noise contains a single paragraph on greenhouse gas emissions that exclusively compares the Project's emissions to those of larger inventories. FEIS at 4-186 [JA490]. The section devoted to climate change addresses climate change in general, compares the Project's emissions to larger inventories, discusses the Commission's use of the social cost of carbon, and addresses the potential emissions of currently proposed and potential future projects that might connect to the Project. *Id.* at 4-255–4-257 [JA561–63].

¹⁰² Rehearing Order ¶ 130 [JA112].

¹⁰³ EPA Guidance Comments at 2 [JA2402].

and [by including a range of estimates] reflect the risks from higher than anticipated damages from climate change. 104

In *High Country Conservation Advocates v. U.S. Forest Service*, the District Court ordered the Bureau of Land Management to use the social cost of carbon tool to evaluate the impacts of a project's greenhouse gas emissions because "a 'hard look' has to include a 'hard look' at whether [the use of the social cost of carbon], however imprecise it might be, would contribute to a more informed assessment of the impacts than if it were simply ignored." 52 F. Supp. 3d 1174, 1193 (D. Colo. 2014). The court found that it was not reasonable for the agency "to ignore a tool in which an interagency group of experts invested time and expertise." *Id.*; *see also Ctr. for Biological Diversity v. Nat'l Hwy. Traffic Safety Admin.*, 538 F.3d at 1200 (holding that an agency cannot assume that there are no costs from carbon pollution and must "discuss the *actual* environmental effects resulting from those emissions." (emphasis in original)).

The Commission acknowledged the social cost of carbon tool but deployed it in an arbitrary fashion that added nothing to the overall assessment of the significance of the Project's climate change impacts. The FEIS provided a range of estimates of the social cost of the carbon emitted by a single year of Project

¹⁰⁴ EPA Comments on FEIS, 2 [JA1989].

operations, assuming those operations occurred in 2015.¹⁰⁵ The Commission's calculation of the cost of the Project's greenhouse gas emissions therefore excluded emissions from construction and from numerous future years of operation. As the cost of emitting greenhouse gas into the atmosphere increases significantly over time, calculating the Project's social cost of carbon over 15 years of operation and including construction emissions would yield estimates ranging from \$25 million to almost \$130 million.

Moreover, there is no indication in the FEIS or Authorization Order that the Commission ever considered the values it calculated as the Project's social cost of carbon or the underlying greenhouse gas emissions in approving the Project. In fact, the Commission effectively admitted that it did not consider the Project's greenhouse gas emissions at all in its consideration of alternatives to the Project and instead "eliminated alternatives [to the Project] on other grounds than relative [greenhouse gas] emissions." The failure to consider greenhouse gas emissions in its consideration of alternatives—the heart of the NEPA process—arbitrarily and capriciously limited the scope of factors that should have informed FERC's decision. ¹⁰⁷

¹⁰⁵ FEIS at 4-256 [JA562].

¹⁰⁶ Rehearing Order ¶ 132 [JA113].

¹⁰⁷ *Id.* [JA113].

FERC attempted to justify its incomplete and inadequate assessment of the Project's climate impacts by attacking the social cost of carbon tool. FERC claimed that the lack of an agreed-upon discount rate is evidence that "the tool is not appropriate for estimating [Project impacts]." EPA however directly rebutted this contention. 109 And even if FERC were correct, the fact that there is no consensus on the discount rate can be accommodated by presenting values calculated with the full range of rates, as the inter-agency developer of the tool recommended. 110 See Ctr. for Biological Diversity v. Nat'l Hwy. Traffic Safety Admin., 538 F.3d at 1201. FERC also could have disclosed the limitations of the tool, as CEQ recommends, instead of arbitrarily using it for a single year of operations and then dismissing even those results. See 40 C.F.R. § 1502.22(a). Moreover, Petitioners do not suggest that the social cost of carbon is the only tool available to FERC. The Commission also could have employed another instrument of its choice to estimate the climate impacts of the Project's direct and

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¹⁰⁸ *Id.* ¶ 131 [JA112–13].

¹⁰⁹ EPA Comments on FEIS at 2 [JA1989].

¹¹⁰ Interagency Working Group on Social Cost of Carbon, *Technical Support Document: Social Cost of Carbon for Regulatory Impact Analysis*, 17–23 (Feb. 2010), https://goo.gl/jvoAVp; see also FEIS at 4-256 [JA562].

indirect greenhouse gas emissions.¹¹¹ Failing entirely to evaluate the Project's climate impacts, however, was a violation of NEPA.

III. THE COMMISSION'S ANALYSIS OF THE PROJECT'S IMPACTS ON WATER QUALITY VIOLATED NEPA.

The Commission failed to adequately evaluate the extent and nature of the Project's impacts on water resources. The information Constitution provided did not permit the Commission to take a hard look at the Project's adverse impacts to water quality. Faced with that same information (if not slightly more), NYSDEC rejected Constitution's application for a 401 Certification. NYSDEC determined that the information Constitution supplied was inadequate for certification that the Project would comply with the Clean Water Act. In particular, Constitution did not provide either agency with site-specific information for the Project's 289 stream crossings. Without this information, NYSDEC found that it was limited

¹¹¹ FERC claimed in the Rehearing Order that the Authorization Order "did employ alternative methods to discuss [greenhouse gases]." Rehearing Order ¶ 132 [JA113]. The Rehearing Order provided no citation for this statement and the Authorization Order did not discuss climate change or greenhouse gas emissions. *See id.* [JA113]; Authorization Order [JA005–61].

¹¹² NYSDEC Denial at 1 [JA2405].

of the 251 streams impacted by the Project. NYSDEC informed Constitution that *all* 251 stream crossings must be evaluated for environmental impacts and that trenchless technology was the preferred method for stream crossing. This information was conveyed to Constitution and FERC on numerous occasions since November 2012; however, Constitution has not supplied the Department with the necessary information for decision making.") (emphasis in original); *see also* Rehearing Request at 16–18 [JA2007–09].

in its "ability to assess the impacts and conclude that the Project will comply with water quality standards." 114

FERC nonetheless accepted Constitution's blanket and unsupported assertions that additional site-specific information was unavailable and concluded that the Project's adverse impacts to water quality could be reduced to less-than-significant levels through the implementation of generic mitigation measures. ¹¹⁵ NEPA requires, however, that the Commission take a hard look at the Project's environmental consequences. *Coal. on W. Valley Nuclear Wastes v. Chu*, 592 F.3d 306, 310 (2d Cir. 2009) (quoting *Sierra Club v. U.S. Army Corps of Eng'rs*, 701 F.2d 1011, 1029 (2d Cir. 1983)). FERC may not presume adequacy of mitigation measures without first understanding the nature and extent of the Project's adverse environmental impacts. ¹¹⁶ *See N. Plains Res. Council, Inc. v. Surface Transp. Bd.*,

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¹¹⁴ NYSDEC Denial at 3 [JA2407].

¹¹⁵ See FEIS at 5-1 ("We determined that construction and operation of Constitution's and Iroquois' projects would result in adverse environmental impacts… However, if the proposed projects are constructed and operated in accordance with applicable laws and regulations, the mitigating measures discussed in this EIS, and our recommendations, these impacts would be reduced to less than significant levels.") [JA656]; see also Authorization Order ¶ 73 [JA028].

given multiple reports that negative impacts on water quality already have occurred and that Constitution has disavowed any ability to control its own right-of-way or prevent those impacts from occurring. *See* AG Complaint ¶ 49 [JA2274]; Answer of Constitution Pipeline Company LLC to Complaint and Petition by the Office of the New York State Attorney General, FERC Docket CP13-499-000, ¶ 12 (June 2, 2016) ("Constitution Answer") [JA2305–07].

668 F.3d 1067, 1084–85 (9th Cir. 2011) ("Mitigation measures may help alleviate impact *after* construction, but do not help to evaluate and understand the impact before construction") (emphasis in original).

Moreover, the Commission based its finding of no significant impact on assumptions about best-case scenarios that the least environmentally-damaging crossing methods could be employed at certain stream crossings. Use of these methods, however, is not required by the Authorization Order, and further study may show that they would not be feasible where FERC presumed them to work, leaving significant unmitigated impacts. FERC's finding therefore cannot be upheld—NEPA requires evaluation of the worst case scenario when faced with incomplete or unavailable information. *Or. Envtl. Council v. Kunzman*, 817 F.2d 484, 495 (9th Cir. 1987).

A. The Absence of Site-Specific Stream Crossing Information Made It Impossible for the Commission to Evaluate the Project's Impacts on Water Quality.

One of the most serious deficiencies in the FEIS is the absence of sitespecific plans for how Constitution intends to conduct stream crossings. To lay pipe across a moving waterbody, Constitution would have to put in place

¹¹⁷ FEIS at ES-4–ES-5 [JA162–63] ("Use of trenchless crossing methods to cross waterbodies and implementation of the mitigation measures outlined in the Constitution's [Environmental Construction Plans] and other project-specific plans would avoid or adequately minimize impacts on surface water resources.").

¹¹⁸ NYSDEC Denial at 8 [JA2412].

substantial erosion and sedimentation control measures, which require expertise and specialized equipment to design and install. These measures often include entirely diverting the flow of a stream through the construction of dams, pumps, and pipes while the natural gas pipeline is laid. 119 To minimize adverse environmental impacts, this complex procedure must be carefully coordinated and timed.

The extent of the potential impacts to each waterbody crossed by the Project depends on a variety of factors, including the conditions at each site, such as the local geology, stream flow, bank formation, and existing water quality; the method of crossing chosen at each site; and the plans and measures taken to avoid impacts and restore the site. 120 Without this information, it is impossible to understand the impacts each pipeline crossing would have on a water body, a fact that is widely recognized by industry and other agencies. 121 Indeed, as the U.S. Fish and Wildlife Service recently recognized in a paper written in collaboration with a pipeline construction company, the amount of information FERC typically asks of

¹¹⁹ FEIS at 2-21–2-22 [JA211–12].

¹²⁰ J. M. Castro et al., U.S. Fish & Wildlife Serv., Risk-Based Approach to Designing and Reviewing Pipeline Stream Crossings to Minimize Impacts to Aquatic Habitats and Species, 31 River Res. & Applications 767, 769 (2015) [Add.A-15].

¹²¹ See, e.g., Canadian Association of Petroleum Producers et al., Pipeline Associated Watercourse Crossings 3rd edition (2005), http://goo.gl/aymwUG.

applicants is so scant that "it is currently impossible to predict the potential impacts of a proposed crossing on the aquatic environment." ¹²²

Lacking site-specific information, the Commission could not properly evaluate the impacts at the 289 proposed crossings, including what method of crossing would be used at each location, the impacts of multiple crossings of the same waterbody, whether in-stream blasting would occur, or the depth of any buried pipeline. Instead, the Commission gave Constitution a menu of stream-crossing options and one-size-fits-all mitigation measures and reduced its analysis to listing some of the major hypothetical impacts of waterbody crossings generally.¹²³

Considering the extent of the missing information, the Commission did not take anything like a hard look at the water quality impacts of the Project, has not "made an adequate compilation of relevant information...[and] has...ignored pertinent data." *Coal. on W. Valley Nuclear Wastes*, 592 F.3d at 310. FERC's review of the Project's impacts on water quality therefore was insufficient under NEPA, and should be remanded for reconsideration.

¹²² J. M. Castro et al., *supra* note 120 at 769 [Add.A-15].

¹²³ FEIS at 2-20–2-25, 4-54–4-57 [JA210–15, 358–61].

1. FERC's Analysis of Water Quality Impacts Was Deficient Because it Was not Based on Site-Specific Information on Stream Crossing Methods.

One of the most critical pieces of information needed to evaluate the impacts of the Project on waterbodies is the method Constitution would use to cross each stream segment. [T]renchless methods present significantly fewer environmental impacts. Wet trenched crossings tend to generate significant turbidity, which in turn has major and long-lasting detrimental effects on stream ecology. Dry trenched crossings methods are associated with less of an increase in turbidity than "wet" crossing methods but result in 100 percent loss of stream bed habitat, at least temporarily. 127

Because trenchless crossings are the most environmentally sound, NYSDEC requested that Constitution assess the feasibility of using trenchless crossings at all 251 crossings in New York State. NYSDEC asked Constitution to produce geotechnical studies and other information to assess whether trenchless crossings would be possible at each site. Constitution never supplied this information, and

¹²⁴ NYSDEC Denial at 8 [JA2412].

¹²⁵ See id. [JA2412].

¹²⁶ Lucie M. Lévesque & Monique G. Dubé, Review of the Effects of In-Stream Pipeline Crossing Construction on Aquatic Ecosystems and Examination of Canadian Methodologies for Impact Assessment, 132 Envtl. Monitoring & Assessment 395, 398–402 (2007) [Add.A33–A37].

¹²⁷ See NYSDEC Denial at 4 [JA2408].

¹²⁸ *Id.* at 8 [JA2412].

NYSDEC cited its failure to do so as one of the primary reasons that it denied Constitution's application for a 401 Certification. 129

Although the Commission also acknowledged that the use of trenchless crossings is much more environmentally protective, ¹³⁰ it allowed Constitution to avoid analyzing the feasibility of performing trenchless crossings at 268 locations, or more than 90 percent of the crossings. In lieu of collecting data, the Commission uncritically accepted Constitution's blanket assertions that "trenchless crossing methods are not practical for waterbody crossings less than 30 feet in width" and that trenchless crossings at other locations could not even be considered due to undefined "[t]echnical constraints and engineering requirements." The Authorization Order then concluded that Constitution proposed using—but was not required to use—trenchless crossings at only 21 locations, approximately 7 percent of the total number of stream crossings. ¹³²

Constitution's inability to access some of the properties where stream crossings were to take place before release of the FEIS does not excuse the Commission's failure to assess the Project's impacts on water quality. FERC was obligated to make use of site-specific information in the public domain and do its best to fill the significant gaps left by Constitution's submissions. *See Kunzman*,

¹²⁹ *Id.* [JA2412].

¹³⁰ FEIS at 4-56 [JA360].

¹³¹ *Id.* at 4-50 [JA354].

¹³² Authorization Order ¶ 77 [JA029].

817 F.2d at 495 (quoting *Save Our Ecosystems*, 747 F.2d at 1244 n. 5, 1248–49). In addition, FERC was required to include a worst case analysis when faced with incomplete or unavailable information. *See Save Our Ecosystems*, 747 F.2d at 1243 (citing 40 C.F.R. § 1502.22). As a report by the U.S. Fish and Wildlife—a cooperating agency in FERC's NEPA process for the Project—concluded: "If land easements are not secured early in the route selection process, alternative development and risk analyses can be significantly impeded if site access is denied by property owners. In such cases...a worst-case scenario for site conditions must be assumed for initial risk screening and analysis." The Commission's failure to ask for site-specific analyses of the feasibility of particular crossing methods at the vast majority of the Project's stream crossings or to develop a worst-case scenario for each crossing therefore constitutes a major violation of NEPA.

2. The FEIS Failed to Evaluate the Cumulative Impact of Multiple Crossings on a Single Waterbody.

The Commission concluded that all of the stream crossing methods described in the FEIS were adequately protective of the environment, without discussing or analyzing the cumulative impacts on a given waterbody that would be crossed multiple times. Even accepting FERC's apparent conclusion that the impacts of one trenched crossing would be insignificant or could be mitigated, the

¹³³ J. M. Castro et al., *supra* note 120 at 769 [Add.A-15].

FEIS neglected to discuss the impacts of multiple trenched crossings on any of the waterbodies that the Project would repeatedly cross.

The cumulative impacts of multiple crossings on one waterbody, however, could be significant. The FEIS explains that trenched crossing methods may temporarily raise stream temperatures, cause direct mortality to wildlife, and contribute to stream turbidity. Executing multiple trenched crossings on the same waterbody easily could compound these impacts, resulting in serious degradation in stream quality:

Construction of a single crossing on a stream or river, or within a watershed, may not have significant effects on fish and fish habitat in that system. Construction of multiple crossings on a stream or river, or within a watershed, however, has the potential for cumulative effects on that system. In such cases, the capacity of the system to recover from impact may be exceeded, and the detrimental effects of crossing construction permanent.¹³⁵

The Commission's failure even to contemplate these impacts and the ways in which they could be mitigated constituted a failure to take a hard look at the Project's environmental impacts.

¹³⁵ Lévesque & Dubé, *supra* note 126 at 407 [Add.A-42].

¹³⁴ See, e.g., FEIS at 4-96, 4-104 [JA400, 408].

3. The Commission Did Not Consider the Impacts of In-Stream Blasting.

In-stream blasting is an extremely destructive activity that, according to the FEIS, may "injure or kill aquatic organisms, displace organisms during blast-hole drilling operations, and temporarily increase stream turbidity. Chemical byproducts from the blasting materials could also be released and could potentially contaminate the water." The FEIS does not evaluate Constitution's use of instream blasting at any site, however, concluding without analysis that "[n]o instream blasting is anticipated." The FEIS does not evaluate Constitution's use of instream blasting is anticipated." The stream blasting is anticipated.

Both the FEIS and the Authorization Order contemplated the possibility of using in-stream blasting to construct the Project. The FEIS states: "If in-stream blasting is required, Constitution has committed to developing a detailed in-stream blasting plan that complies with state-specific regulations and permit conditions. However, this plan has not been provided to FERC." The Authorization Order does not impose any requirements on Constitution regarding in-stream blasting, including whether, when, where, or how Constitution could engage in this

¹³⁶ FEIS at 4-55 [JA359].

¹³⁷ *Id.* at 4-97 [JA401].

¹³⁸ *Id.* [JA401].

environmentally-damaging activity.¹³⁹ FERC merely requires submission of a plan if Constitution decides to conduct in-stream blasting *after* Project approval.

The Commission cannot claim to have adequately assessed potential impacts from in-stream blasting without having any site-specific environmental or engineering information. FERC was not permitted to approve the Project and then study it effects after the fact. *See Nat'l Parks & Conservation Ass'n v. Babbitt*, 241 F.3d 722, 734 (9th Cir. 2001). The lack of information on whether and how in-stream blasting would occur "is precisely the information and understanding that is required *before* a decision that may have a significant impact on the environment is made." *See id.* at 733 (emphasis in original).

4. The FEIS Failed to Consider Site-Specific Risks in Its Evaluation of Pipe Burial Depths.

The depth at which a pipe traversing a waterbody should be buried at each crossing depends on a variety of site-specific factors. The risk of exposing a pipeline buried within the bed of a waterbody varies depending on the rate at which the streambed erodes. Risks associated with pipes buried at insufficient depths include pipe exposure, which leads to a higher risk of pipe rupture and

¹³⁹ Authorization Order at Condition 27 ("Prior to in-stream blasting at any waterbody crossing, Constitution shall file with the Secretary for review and approval of the Director of OEP, a site-specific Blasting Plan that provides protocols for in-stream blasting and the protection of the fisheries and aquatic resources and habitat. These plans shall be developed in consultation with applicable state resource agencies.") [JA058].

requires "more extensive stabilization measures and in stream disturbances resulting in addition[al] [sic] degradation to environmental quality."¹⁴¹ The FEIS does not contain a crossing-specific analysis of the risk of burying the pipeline at insufficient depths.

The Commission again impermissibly employed a one-size-fits all proposal for pipe depth without examining any site-specific information. Constitution proposed and FERC accepted that "[a]t waterbody crossings the pipeline would be buried to a greater depth allowing for a minimum of 60 inches of soil cover or 24 inches of cover in consolidated rock."142 Because the Commission did not require Constitution to provide site-specific information about geologic and other conditions at these crossings, it could not adequately assess the potential environmental risks and impacts posed by pipeline burial depth at each of the waterbodies crossed by the pipeline. FERC's failure to obtain this information violates NEPA, which required that "available data is gathered and analyzed prior to the implementation of the proposed action." See LaFlamme v. FERC, 852 F.2d 389, 400 (9th Cir. 1988) (quotation omitted).

¹⁴¹ NYSDEC Denial at 13 [JA2417]. ¹⁴² FEIS at 4-18 [JA322]; *see also id.* at 2-16 [JA206].

B. FERC Impermissibly Based Its Finding of No Significant Environmental Impacts on Impermissible Assumptions.

Both the FEIS and Authorization Order effectively assumed that

Constitution would use trenchless crossings—a far less environmentally-damaging method— at 21 waterway crossings. The FEIS concludes, "Use of trenchless crossing methods to cross waterbodies and implementation of the mitigation measures outlined in Constitution's [Environmental Compliance Plans] and other project-specific plans would avoid or adequately minimize impacts on surface water resources." However, the Authorization Order does not require that Constitution actually use trenchless crossings because Constitution had not determined the feasibility of trenchless crossings at most of the 21 proposed locations.

[145]

The Commission claimed in the Rehearing Order that Constitution's potential inability to use trenchless crossings was not a fatal defect in its NEPA

¹⁴³ FEIS at 5-8 ("Constitution proposes to use the conventional bore method at 14 waterbody crossings and the Direct Pipe method at 7 waterbody crossing. *These methods would avoid impacts on the streambed, stream banks, and aquatic resources.* Constitution would use dry crossing methods (flume, dam and pump, or cofferdam) at the remaining crossings in order to minimize potential sedimentation and turbidity impacts.") (emphasis added) [JA572]; Authorization Order at Condition 14 "**Prior to construction,** Constitution shall file with the Secretary all outstanding geotechnical feasibility studies for trenchless crossing locations.") (emphasis in original) [JA056].

¹⁴⁴ FEIS at ES-4–ES-5 [JA162–63].

¹⁴⁵ *Id.* at 4-4 ("Constitution is currently proposing to cross these 21 locations via 13 trenchless crossings. Geotechnical studies at three locations have been completed[.]") [JA308]; Authorization Order at Condition 14 [JA056].

analysis because the FEIS reviews all viable alternative trenching methods and their associated impacts. As discussed above, FERC's evaluation does not include any site-specific analysis and therefore does not contain an actual review of the impacts of using other as-yet unidentified methods to cross the 21 waterbodies where Constitution initially planned to use trenchless methods. The Commission therefore had no idea to what extent the impacts to those waterbodies actually would be mitigated.

Similarly, the Commission concluded that adverse impacts to the other 268 stream crossings would be mitigated to levels that were less-than-significant because it assumed that Constitution would use dry crossing methods at those locations. When FERC made this finding, Constitution had not conducted all the feasibility studies needed to determine whether using dry crossing methods would be possible. There also is nothing in the Authorization Order that required Constitution to use dry crossing methods. FERC admitted that the use of wet crossing methods might be possible, but did not evaluate the potential impacts of

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 $^{^{146}}$ Rehearing Order ¶ 49 ("In the event that a trenchless crossing method is determined not to be feasible, one of the alternate methods would be selected. Each of the alternative crossing methods and their requisite impacts were examined in the EIS") [JA080–81].

¹⁴⁷ FEIS at ES-6 ("Constitution would use a dry crossing method for *all* waterbodies, which would avoid in-stream construction, and allow flow to be maintained, and minimize downstream sedimentation and turbidity.")(emphasis added) [JA164].

using that method at any of the crossings. 148 The evidence before the Commission did not support the assumption that dry crossings would be used and therefore cannot form the basis for FERC's ultimate conclusion that the Project's impacts would be mitigated. See New Mexico ex rel. Richardson v. Bureau of Land Mgmt., 565 F.3d 683, 704 (10th Cir. 2009) (finding an abuse of discretion when an agency based "an explanation for its decision that runs counter to the evidence before the agency") (internal quotation omitted).

In order for the Commission to have known the true impacts of choosing another crossing method at any one of the waterbodies crossed by the Project, it would have had to analyze impacts from trenched crossings at all sites where trenchless crossings had not been studied for feasibility and from wet crossings where dry crossings had not been studied for feasibility. See Kunzman, 817 F.2d at 495 ("[A]n EIS must include a worst case analysis when an agency is faced with incomplete or unavailable information."). An EIS cannot meaningfully evaluate the water quality impacts of a project involving stream crossings without specifying whether trenched, trenchless, dry, or wet methods would be used at particular locations. The Commission's failure to require this specification is a derogation of its duties under NEPA.

¹⁴⁸ FEIS at 2-21 ("Wet, open-cut crossing methods are not proposed for any waterbodies, but could be considered if the dry crossing options are rendered *infeasible*...Implementation of these methods would require additional review by the COE, PADEP, NYSDEC, and the Commission.") (emphasis added) [JA211].

IV. FERC VIOLATED THE CLEAN WATER ACT BY APPROVING THE PROJECT BEFORE NEW YORK DECIDED WHETHER TO ISSUE A SECTION 401 CERTIFICATION.

FERC violated the plain language of the Clean Water Act by granting the Authorization Order before NYSDEC made a decision on Constitution's application for a 401 Certification. Section 401 has been interpreted to require that a state complete the 401 Certification process prior to the federal agency's approval of a project. Although FERC conditioned its approval of the Project on Constitution's ultimate receipt of all necessary federal permits, the premature granting of the Authorization Order nevertheless violated the Clean Water Act. FERC cannot be permitted to prejudge the outcome of a state's review of the water quality impacts of a project and to authorize damaging activities prior to certification, especially when those activities may adversely impact the state's navigable waters.

A. The Clean Water Act Requires that FERC Withhold Pipeline Approval Until the State Has Granted a Section 401 Certification.

FERC violated the clear terms of the Clean Water Act by granting

Constitution the Authorization Order before NYSDEC issued the company a

Section 401 Certification. Under Section 401(a)(1) of the Clean Water Act, an

applicant for a federal license to conduct an activity that may result in discharges

into jurisdictional waters must obtain a 401 Certification from the state that is

home to those waters.¹⁴⁹ The certification process allows the state to evaluate and certify that discharges from a proposed project within its jurisdiction will comply with the requirements of the Clean Water Act. 33 U.S.C. § 1341(a)(1). The statute unequivocally states: "No [federal] license or permit shall be granted until the certification required by this section has been obtained." *Id*.

The legislative history of the Clean Water Act confirms that Congress intended to empower the states to stop federal agencies from approving projects that might threaten state water quality. The Senate Report plainly provides that Section 401 "continues the authority of the State . . . to act to deny a permit and thereby *prevent* a Federal license or permit from issuing to a discharge source. . . . Should such an affirmative denial occur no license or permit could be issued by such Federal agencies." Sen. Rep. No. 92-414 (1971), *reprinted in* 1972 U.S.C.C.A.N. 3668, 3735 (1972) (emphasis added).

Courts repeatedly and consistently have read the Clean Water Act to require a federal agency to withhold approval until the affected state issues or waives the 401 Certification. The Supreme Court explained that "§ 401 of the [Clean Water] Act requires States to provide a water quality certification *before* a federal license or permit can be issued for activity that may result in any discharge into intrastate

¹⁴⁹ The requirement to obtain a 401 Certification is deemed waived if the state fails to act within a year of receiving an application for a 401 Certification. *See* 33 U.S.C. § 1341(a)(1).

[jurisdictional] waters." PUD No. 1 of Jefferson Cnty. v. Wash. Dep't of Ecology, 511 U.S. 700, 707 (1994) (emphasis added). Other courts therefore have found that "FERC's role is limited to awaiting, and then deferring to, the final decision of the state. Otherwise, the state's power to block the project would be meaningless." City of Tacoma, Wash. v. FERC, 460 F.3d 53, 67 (D.C. Cir. 2006). Without "assurance that the certification the state has issued satisfies section 401," FERC "has no authority to grant a license." *Id.* at 68; see also Ala. Rivers Alliance v. FERC, 325 F.3d 290, 292-93 (D.C. Cir. 2003) (vacating FERC order approving a modification to hydroelectric dam lacking a 401 Certification and finding "if the 'originating' state denies an applicant section 401(a)(1) certification, FERC may not issue that applicant a [federal] license."). This Court also explained that "a federal agency, when issuing a license covered by § 401 of the [Clean Water Act], must ascertain whether a valid state certification exist." Am. Rivers v. FERC, 129 F.3d 99, 109 (2d Cir. 1997). None of these opinions suggest that conditioning the Commission's final order approving a project on the future acquisition of a 401 Certification would comport with the clear edict in Section 401 that states must act before the federal approval is granted.

B. FERC's Conditional Approval of the Project Violated the Clean Water Act.

Although FERC's Authorization Order is conditioned on Constitution's receipt of all required 401 Certifications, the Commission's approval of the Project nevertheless violates the Clean Water Act. 150 With the Authorization Order in hand, Constitution was allowed to put the Project in motion as if NYSDEC's approval was all but certain. FERC's approval granted Constitution powers of eminent domain to seize, use, and control of private property for the right-ofway. 151 As a result, tree cutting and other construction-related activities occurred within the right-of-way in New York, before NYSDEC made its Section 401 decision.¹⁵² Some of the tree removal occurred "near streams and directly on the banks of some streams, and in one instance has resulted in trees and brush being deposited directly in a stream, partially damming it."¹⁵³ This contradicts the entire purpose of Section 401, which is to ensure that proponents of activities that may result in discharges to jurisdictional waters not be "able to make major investments"

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¹⁵⁰ To the extent that FERC interprets the Clean Water Act to allow it to issue such conditional permits before a state 401 Certification has been granted, that interpretation is not entitled to any "judicial deference under the doctrine of *Chevron USA, Inc. v. Natural Resources Defense Council* . . . because the Commission is not Congressionally authorized to administer the [Clean Water Act]." *See Am. Rivers*, 129 F.3d at 107.

¹⁵¹ *See* AG Complaint ¶ 79 [JA2284].

¹⁵² *Id.* ¶¶ 46–51 [JA2272–75]; NYSDEC Denial at 2 [JA2406].

¹⁵³ NYSDEC Denial at 2 [JA2406]; *see also* AG Complaint ¶¶ 64, 66 [JA2279–80, 2280–81].

in facilities under a Federal license or permit without providing assurance that the facility will comply with water quality standards." *See S.D. Warren Co. v. Me. Bd. of Envtl. Prot.*, 547 U.S. 370, 386 (2006) (quoting 116 Cong. Rec. 8984 (1970)).

The New York Attorney General's Office conducted a thorough investigation of these activities and determined that, while the tree removal was done by the landowners or third parties, it occurred with Constitution's knowledge and perhaps even encouragement.¹⁵⁴ Buoyed by the Authorization Order, Constitution sent a letter to the landowners in January 2016 stating that it intended to begin pipeline construction in the Spring of 2016, providing ample incentive for property owners to preemptively have trees cut on their land.¹⁵⁵ Constitution did nothing to stop the tree removal¹⁵⁶ and now has denied that it had any responsibility over landowner actions on its right-of-way.¹⁵⁷ The Commission has had almost two months to take action against Constitution and has done nothing to date.

Despite the condition in the Authorization Order, the New York Attorney

General determined that a discharge occurred into the navigable waters of the State

of New York prior to NYSDEC having made a decision on the 401 Certification.
This case therefore differs substantially from *Gunpowder Riverkeeper v. FERC*,

¹⁵⁴ AG Complaint ¶¶ 48, 53 [JA2273, 2275–76].

¹⁵⁵ See id. ¶ 111 [JA2292].

¹⁵⁶ *Id.* ¶ 47 [JA2273].

¹⁵⁷ Constitution Answer ¶ 48 [JA2323–24].

¹⁵⁸ AG Complaint ¶ 66 [JA2280–81].

807 F.3d 267 (D.C. Cir. 2015), and illustrates that Judge Rogers' concurrence concluding "[t]he plain text of the Clean Water Act does not appear to prohibit the kind of conditional certificate the Commission issued here" is mistaken. ¹⁵⁹ *Id.* at 279 (Rogers, J., dissenting in part and concurring in the judgment). Unlike here, Judge Rogers was not presented with facts illustrating the full ramifications of allowing FERC's conditional approval to impermissibly create a presumption that the project will go forward. This presumption in turn created incentives for applicants to allow, or at least fail to stop, activities that may cause discharges into the navigable waters of a state that has yet to act under Section 401. Indeed, the concurrence in *Gunpowder* relied on the fact that there was no evidence that any discharge had occurred. ¹⁶⁰ *Id.*

The language, structure, and intent of the Clean Water Act clearly are aimed at giving states every opportunity to protect their waterways from unlawful

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The majority declined to reach the merits of the case, dismissing on standing grounds. 807 F.3d at 273–75.

The cases Judge Rogers cited to in support of her view involved conditional orders that kept the prohibited activity from occurring while the necessary conditions were met. *See City of Grapevine, Tex. v. Dep't of Transp.*, 17 F.3d 1502, 1503 (D.C. Cir. 1994) (allowing a conditional grant by the Federal Aviation Administration of federal funding to a project pending completion of a review process required by the National Historic Preservation Act as long as federal dollars were not be spent before completion of the review); *Pub. Utils. Comm'n of Cal. v. FERC*, 900 F.2d 269, 282 (D.C. Cir. 1990) (noting that "the Commission's non-environmental approval was expressly not to be effective until the environmental hearing was completed").

discharges. Because the Authorization Order deprived New York State of this opportunity, FERC violated the Clean Water Act.

CONCLUSION

For the foregoing reasons, Petitioners respectfully request that the Court vacate the Rehearing Order and Authorization Order and remand this proceeding to the Commission for compliance with NEPA.

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FEDERAL RULES OF APPELLATE PROCEDURE FORM 6 CERTIFICATE OF COMPLIANCE WITH RULE 32(a)

Certification of Compliance with Type-Volume Limitation, Typeface Requirements and Type Style Requirements

- 1. This brief complies with the type-volume limitation of Fed. R. App. P.32(a)(7)(B) and the Court's March 11, 2016 Order because this brief contains 13,942 words, excluding the parts of the brief exempted by Fed. R. App. P. 32(a)(7)(B)(iii).
- 2. This brief complies with the typeface requirements of Fed. R. App. P. 32(a)(5) and the type style requirements of Fed. R. App. P. 32(a)(6) because this brief has been prepared in a proportionally spaced typeface using Microsoft Word 2010 in Times New Roman 14 point font.

/s/ Moneen Nasmith	/s/	Moneen	Nasmith	
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Dated: October 17, 2016

CERTIFICATE OF SERVICE

In accordance with Fed. R. App. P. 25(d) and Local Rule 25.1(h), I hereby certify that on October 17, 2016, the foregoing Final Form Opening Brief for Petitioners Catskill Mountainkeeper, Inc.; Clean Air Council; Delaware-Otsego Audubon Society, Inc.; Riverkeeper, Inc.; and Sierra Club was electronically filed through this Court's CM/ECF system, which will send a notice of filing to all registered users.

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